# Senuri Wijenayake

# PhD Candidate | Human Computer Interaction Group, University of Melbourne



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# **PROFILE**

I am a PhD candidate investigating how socio-psychological factors such as social conformity influences human behaviour in online group settings. I am currently seeking an internship in the areas of Social Computing and Human Computer Interaction, where my experience conducting user studies (online and offline) can be utilised to resolve novel challenges, while also having the opportunity to contribute towards research publications. I have prior experience in full stack software development, product designing and implementing agile software processes in small to medium scaled teams. I also enjoy teaching and mentoring graduate and undergraduate students, and conducting seminars to raise awareness of higher education opportunities to high school and undergraduate students in Sri Lanka.

# **EDUCATION**

# **PhD in Computer Science**

Jul 2018 - Present

School of Computing and Information Systems, University of Melbourne, Australia.

**Thesis:** Understanding Dynamics of Online Social Conformity **Supervised By:** Dr. Jorge Goncalves and Prof. Vassilis Kostakos

#### **BSc.** (Hons) Information Technology

May 2013 - Oct 2017

Faculty of Information Technology, University of Moratuwa, Sri Lanka.

#### **Highlights:**

- Gold Medal for the Best Academic Performance for the 2017 at the BSc. (Hons) IT Examinations.
- Gold Medal for the Most Outstanding Student of University of Moratuwa for 2017 for outstanding academic performance, research contribution, volunteer work and extra-curricular activities.

# **EXPERIENCE**

Academic Tutor Jan 2019 – Present

School of Computing and Information Systems, University of Melbourne, Australia.

- Experience conducting both physical and online tutorials for graduate and undergraduate students.
- Received the **Excellence in Tutoring Award** in recognition of the excellent contribution to tutoring in School of Computing and Information Systems in 2019.
- Mentoring a postgraduate HCI Project (INFO90008) investigating social conformity in online group chatting environments.
- Course Modules Tutored:
  - o Evaluating User Experience (INFO90004)
  - o Fundamentals of Interaction Design (INFO10003)
- Certifications:
  - Melbourne Teaching Certificate for Graduate Researchers awarded by the Melbourne Centre for the Study of Higher Education, University of Melbourne.
  - Foundations of Teaching and Learning for Graduate Researchers awarded by the Melbourne Centre for the Study of Higher Education, University of Melbourne.

#### **Full Stack Developer**

Aug 2017 - Jun 2018

Tracified, 99X Technology, Sri Lanka.

- Based on the concept "Trust Through Traceability", Tracified can be used by vendors of premium products (e.g., organic food, gems) to provide transparency into their product's journey from its origin to the marketplace (demo).
- Responsibilities:
  - Software development using TypeScript, NodeJs and AngularJs.
  - Leading a 20+ team of Developers, UX Engineers and Quality Assurance Engineers and overseeing the scrum activities as the team's Scrum Master.
  - Communicating with current and potential clients for product engineering and customisations.

#### **Software Engineering Intern**

PicaSix, 99X Technology, Sri Lanka.

- Developed a web-based supply chain management system for PicaSix to combine and align process of complex supply chains between importers, suppliers, production, wholesalers and end-consumers.
- **Responsibilities:** 
  - Software development using AngularJs, JavaScript, HTML, CSS and Ruby on Rails.
  - Researching and deploying the server as a Docker container.

#### **Undergraduate Developer**

Aug 2014 – May 2015

E-kilder, Embla Software Innovations, Sri Lanka.

- Developed an interactive website to digitise handwritten information of Norwegian church books (available as scanned images) through crowdsourcing and use that information to enable users to discover and graphically illustrate their family trees.
- **Responsibilities:** 
  - Full stack software development using HTML, CSS, JavaScript, C#, Entity Framework and SQL Server.
  - Communicating with the Product Owner and the Business Analyst for requirement gathering, customisations and technical walk-throughs.

# **PUBLICATIONS**

#### **Quantifying the Effect of Social Presence on Online Social Conformity**

**CSCW 2020** 

S. Wijenayake, N. van Berkel, V. Kostakos, J. Goncalves

Proceedings of the ACM on Human-Computer Interaction, 4 (CSCW1), 55:1 - 55:22. [pdf]

# **Bots for Research: Minimising the Experimenter Effect**

CHI 2020

S. Wijenavake, N. van Berkel, J. Goncalves

International Workshop on Detection and Design for Cognitive Biases in People and Computing Systems (CHI'20). [pdf]

#### **Impact of Contextual and Personal Determinants on Online Social Conformity**

**CHB 2020** 

S. Wijenayake, N. van Berkel, V. Kostakos, J. Goncalves

Computers in Human Behaviour, 108: 106302. [pdf]

# Measuring the Effects of Gender on Online Social Conformity

**CSCW 2019** 

S. Wijenayake, N. van Berkel, V. Kostakos, J. Goncalves

Proceedings of the ACM on Human-Computer Interaction, 3 (CSCW), 145:1 - 145:24. [pdf]

#### Crowdsourcing Perceptions of Fair Predictors for Machine Learning: A Recidivism Case Study

**CSCW 2019** 

N. van Berkel, J. Goncalves, D. Hettiachchi, S. Wijenayake, R.M. Kelly, V. Kostakos

Proceedings of the ACM on Human-Computer Interaction, 3 (CSCW), 28:1 – 28:22. [pdf]

#### Improving Accuracy in Mobile Human Contributions: An Overview

UbiComp 2018

N. van Berkel, M. Budde, S. Wijenayake, J. Goncalves

Adjunct Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'18 Adj.), 594 – 599. [pdf]

# Predicting Tie Strength between Facebook Friends to Improve Accuracy in Travel

**PACIS 2018** 

**Recommendation Systems** 

S. Wijenayake, S. Ganiachchi, J. Wijekoon, S. Ahangama

Proceedings of the Pacific Asia Conference on Information Systems 2018 (PACIS'18), 246:1 - 246:24.

# A Decision Tree Approach to Predicting Recidivism in Domestic Violence

**PAKDD 2018** 

S. Wijenayake, T. Graham, P. Christen

Proceedings of the Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'18), pp. 3 - 15. Springer, Cham. [pdf]

#### A Context Aware & Personalized Multiple Location Trip Planner Using Facebook Check-ins of a User

**ICTER 2017** 

S. Wijenayake, S. Ganiachchi, J. Wijekoon, S. Ahangama

Proceedings of the 17th International Conference on Advances in ICT for Emerging Regions (ICTer'17). [pdf]

# Creation of Semantic Location Profiles using Bayes, Rule-Based, Trees and Meta Classification **Approaches**

ICNC-FSKD 2017

S. Ganiachchi, S. Wijenayake, J. Wijekoon, S. Ahangama

Proceedings of the 13th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2017), 1604 – 1609. [pdf]

# **TEACHING**

#### • Academic Tutoring

- Evaluating the User Experience (INFO90004) in 2019 & 2020.
- Fundamentals of Interaction Design (INFO10003) in 2019.

#### Mentoring

• Mentoring a postgraduate HCI Research Project (INFO90008), investigating social conformity in online group chatting environments in 2020.

#### • Exam Supervision

- Supervising **online Zoom examinations** in Semester 1 in 2020, closely working with the Exams Office of University of Melbourne.
- Invigilating examinations for Knowledge Technologies (COMP90049) and Graphics and Interaction (COMP30019) in 2018 & 2019.

# AWARDS & SCHOLARSHIPS

- Excellence in Tutoring Award offered by the School of Computing and Information Systems, University of Melbourne in recognition for an excellent contribution to tutoring in 2019.
- **Rowden White Scholarship** awarded based on academic merit by University of Melbourne for year 2018.
- **Melbourne Research Scholarship** offered by University of Melbourne (2018 present).
- **Best Paper Award** at the Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'18) for paper titled "A Decision Tree Approach to Predicting Recidivism in Domestic Violence" [pdf].
- Gold Award in Retail and Supply Chain Management at the National Best Quality Software Awards (NBQSA) Sri Lanka in 2017 for software project "Tracified".
- **Merit Award** in Culture and Tourism at the **e-Swabhimani'17**, organised by ICTA Sri Lanka for undergraduate research project "TravelSL".

# VOLUNTARY WORK

# **Committee Member (Media & Communications)**

Sri Lankan Graduates' Society, University of Melbourne, Australia.

May 2019 - Present

# **Editor in Chief – FIT Chronicle**

Faculty of Information Technology, University of Moratuwa, Sri Lanka

**Jan 2015 – Aug 2017** 

- FIT Chronicle the academic magazine of the Faculty of IT, University of Moratuwa is the
  outcome of combined effort from the faculty and students, where I had the privilege of working
  together with an extremely committed editorial team, to revamp the magazine with a dash of life
  and pride.
- Under my leadership, the FIT Chronicle brought the spotlight onto **faculty events**, **academic programs**, **student achievements**, **student extracurricular activities** with a new addition of a "students' corner" to exhibit composing talents and artistic insight of FIT students.

See FIT Chronicle: 2015 Edition 2016 Edition

#### **Motivational Speaker & Mentor**

May 2015 - Present

- Conducting online seminars to undergraduate students at University of Moratuwa on international opportunities for higher education (2018 present).
- Conducting seminars to rural schools in Sri Lanka on higher education opportunities (2015 2017).
- Mentoring high school students at Visakha Vidyalaya, Sri Lanka on their GCE Advanced Level IT Projects in 2017.